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ABSTRACT

Noting that a major problem confronting competency based teacher education (CBTE) programs was the development of mutually acceptable perceptions of teacher education among college faculty, school personnel, and prospective teachers, a cluster of competencies developed by the State University College at Oneonta (SUCO), New York, was critiqued by these three groups. Opinions about the relative importance of the twenty-five generic competencies used in the SUCO/CBTE program were collected from the faculty and students of the college and from the faculty in the surrounding schools. A factor analysis was made on the responses to identify categories of competencies which could be defined as generic teacher roles. This analysis resulted in four clusters or teacher roles as measured by the twenty-five original competencies: (1) teacher as a strategist; (2) teacher as a person; (3) teacher as an assessor; and (4) teacher as a professional. An analysis of the results of the questionnaire indicated that preservice teacher education students tend to rate the importance of the role of the teacher as person higher than did the faculty from both the college and the participating schools. A second finding suggested that the students rate the importance of teacher as a professional higher than the school faculty but not higher than the college faculty. The findings from this study are discussed, and a copy of the questionnaire is appended. (JD)

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A COMPARISON OF I.H.E. FACULTY, L.E.A. FACULTY, AND I.H.E. STUDENT PERCEPTIONS OF SELECT TEACHER COMPETENCIES

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Introduction

Based upon the presentation of Denny and Wolf (1978) which described the procedure by which the State University of New York at Oneonta developed its original four clusters of twenty-five competencies for its CBTE program in elementary education, this paper discusses the similarities and differences among the various groups (I.H.E. faculty, L.E.A. personnel, and preservice elementary teachers) who formed the data base for the factor analysis and ANOVA of the competencies.

Need for the Study

Such a comparison is warranted because of the sparsity of research on effective teacher characteristics and of the sparsity of literature related to professional agreement between the practicing and training arms of the profession on desirable characteristics for teachers.

Early studies relating teacher behavior and pupil achievement attempted to define the "best teacher". However, A.S. Barr (1961) in reviewing and researching teacher effectiveness measures, found that much of the literature dealt with opinions. In fact, he noted that in uncontrolled situations the judgments of a group of supervisors, administrators, and teacher educators, observing the same teacher

at the same time, under identical conditions, vary so much that some observers rated a single teacher as among the very best they observed and others rated the same teacher as among the very worst.

Medley and Mitzel (1959) noted similar findings and Medley (1972) concluded that research based on opinions was a relative waste of time if one wished to identify effective teacher characteristics.

Dunkin and Biddle also commented that:

> ...(S)peculations about the specificity or generality of effective teaching have little support from research to date. (1974, p. 74)

More specifically related to the problem of agreement among different groups of evaluators, the literature is inconclusive.

Taylor and Maguire (1967) in a study of the perceptions of Illinois high school science teachers, professors and doctoral candidates in biological sciences, and curriculum materials authors found no major differences among the group's perceptions of broad science objectives.

Weilbaker, Johnston, Marble, and Staszkiewicz (1976) similarly suggested that while different groups of evaluators may contribute a unique perspective to the assessment of the teaching act, the differences may result from the value assigned to each factor rather than from significant differences in the character of the domains being evaluated.

A similar hypothesis was set forth by Thomas and Kay (1974) whose research findings indicated that teachers and supervisors manifested considerable agreement in designating hierarchies of competencies. College personnel were not included in this study, and the researchers were led to conclude that:

> Consensus of opinion on what teaching behaviors and skills are more important than others is difficult to obtain, because such judgments reflect a broad range of values based on diverse philosophies of education and theories of learning. (p. 156)

This view has been supported by the work of Rosenshine (1971), Del Schalock (1970), and Stake (1970). B.O. Smith (1969) carried the notion a step further and noted that judgments concerning necessary competencies to be exemplified by the work of Giles and Foster (1972) who, based upon their experiences at the University of Washington, Seatle, noted that a major problem confronting CBTE programs was the development of mutually acceptable perceptions of teacher education among professors, school administrators, teachers, and prospective teachers.

In contrast, Woods and Wood (1978) reported on a comparison study of most important and most emphasized areas of study (professional education content) and behavioral sciences in doctoral programs for curriculum

practitioners since 1969. Their data suggest that of ten areas of study indicated as most important in 1969 by professors and practitioners, nine of the areas were identical with only slight variations in rankings. A similar comparison of these two groups in terms of the most important areas of behavioral sciences, showed agreement on nine of the ten areas to be stressed.

The literature on comparisons of L.E.A., I.H.E., and student groups is very scarce as noted by Eva Baker. Her research (1972) utilizing parents, teachers, and junior high students as raters of the importance of some fifteen objectives related to junior high mathematics, yielded a slightly negative correlation (-.21) between teacher and student ratings.

It is in light of the inconclusiveness of data about knowledge of and shared perceptions of the profession of effective teacher characteristics as well as the fact that although there was substantial practitioner input into the observation of State University-Oneonta competencies, the final clustering of competencies was a product of the I.H.E. faculty, (Denny & Wolf, 1978) that the validation of the competency clusters through factor analysis and ANOVA was undertaken. The results of that analysis are reported in Tables 1 through 7. A reporting of the

differences among the three groups (I.H.E. faculty, L.E.A. personnel, and preservice elementary teachers) follows.

PROCEDURES

The procedures employed during this study are itemized below:

1) Opinions about the relative importance of the twenty-five generic competencies used in the SUCO/CBTE program were collected from faculty in the surrounding schools, from S.U.C.O. faculty and from S.U.C.O. students majoring in elementary education.

2) A factor analysis was performed on the responses to identify categories of competencies which could be defined as generic teacher roles. Factor scores were computed for each factor.

3) Each factor score served as the dependent variable in subsequent analysis of variance to determine differences in I.H.E. faculty, I.H.E. student, and L.E.A. faculty opinions concerning these teacher roles.

4) Scheffe's test was used to determine the cells whose means were significantly different from one another.

QUESTIONNAIRE

A questionnaire was developed (Appendix A) containing 25 statements of teacher effectiveness. The statements

were constructed from the 25 competencies currently used in the S.U.C.O. competency based teacher education program. Using a fine-point Likert scale (Strongly Disagree, Disagree, Undecided, Agree, and Strongly Agree) respondents were asked to rate the degree to which they agreed with each competency statement. In an attempt to reduce random error all participants were instructed to respond to each item as it applied to the beginning first-year teacher.

Sample

The questionnaires were mailed to all 145 teacher education faculty at S.U.C.O., 400 randomly selected S.U.C.O. education majors, and all teachers (grades N-9) in the 34 school districts surrounding Oneonta. Responses were obtained from 59 S.U.C.O. faculty (41%), 157 S.U.C.O. students (39%), and 449 L.E.A. faculty. Since the exact number of teachers employed by these 34 districts was unknown (questionnaires were mailed to each school for distribution), it was not possible to compute the exact percentage of teacher responses. However, responses were obtained from 26 of the 34 school districts (76%) so that a fairly large geographic area was represented.

Table 1 contains a crosstabulation of the three groups by sex. It should be noted, however, that not

all respondents completed the demographic portion of the survey.

TABLE 1

CROSSTABULATION OF GROUPS BY SEX

GROUP	MALE	FEMALE	NO RESPONSE
I.H.E. FACULTY	36	18	5
I.H.E. STUDENT	31	125	1
L.E.A. FACULTY	81	340	28
TOTAL	148	483	34

Analysis and Results

The data analysis consisted of two steps: a factor analysis* and an analysis of variance.** The factor analysis was performed to reduce the original 25 competencies into four clusters, which could be interpreted as teacher roles. Factor scores were then computed for each role and served as dependent variables in the analysis of variance.

FACTOR ANALYSIS

The data from the 665 respondents were submitted to

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* The factor analysis program employed was from the Statistical Packages For the Social Sciences (SPSS) by Nie, Hull, Jenkins, Steinbrenner, and Bent; Mc Graw Hill Book Company, New York, 1970; Chapter 24, "Factor Analysis" by Jae-On Kim.

** The Analysis of Variance program employed was also from the Statistical Packages For the Social Sciences (SPSS); Chapter 22, "Analysis of Variance and Covariance: Subprograms ANOVA and Oneway" by Jae-On Kim and Frank J. Kohout.

principal components analysis and the resulting factors rotated employing the varimax transformation (SPSS MANUAL, p. 45). Since the S.U.C.O./C.B.T.E. program currently clusters the competencies into the four areas of teacher as a person, teacher as a diagnostician, teacher as an implementor, and teacher as an evaluator , it was decided that it would be helpful to control the number of factors by extracting only four. This information could then also be of use for internal program evaluation and possible revision.

Inspection of the "high loading" items within each factor resulted in the following four clusters or teacher roles, as measured by the 25 original competencies (Denny and Wolf, 1978):

FACTOR 1: Teacher as a strategist
FACTOR 2: Teacher as a person
FACTOR 3: Teacher as an assessor
FACTOR 4: Teacher as a professional

Table 2 contains the varimax rotated factor loadings for each cluster and the percentage of variance accounted for in the original 25 items.

ANALYSIS OF VARIANCE

The second stage of the analysis involved a one-way, three group, analysis of variance with each of the factor scores serving as dependent variables.

TABLE 2

VARIMAX ROTATED FACTOR LOADINGS
for CBTE QUESTIONNAIRE

FACTOR	LOADING	ITEMS
1: TEACHER as a STRATEGIST (PCT of VAR = 84.8)	.54	prescribes appropriate objectives for pupils under consideration
	.64	uses a variety of curriculum materials and/or learning activities
	.63	prescribes appropriate instructional strategies
	.58	measures and evaluates curriculum materials and/or learning activities to meet identified pupil needs and modifies accordingly
	.73	uses a variety of instructional strategies and teacher aids
	.68	prescribes appropriate curriculum materials and/or learning activities
	.49	organizes various pupil groupings as required
	.50	measures and evaluates pupil performance in relation to objectives and modifies accordingly.

FACTOR	LOADING	ITEMS
	.47	organizes classroom facilities to meet identified pupil needs
	.41	uses resource personnel within and without the school
2: Teacher as a Person (PCT of VAR = 8.2)	.59	demonstrates flexibility in adapting to varied situations
	.52	works cooperatively and effectively with students, teaching colleagues, and other school/community personnel
	.50	uses classroom regulatory procedures (regarding freedom and constraint) to meet pupil needs
	.53	fosters an atmosphere conducive to high student interest, enthusiasm, initiative, and/or creative pursuit
	.60	exhibits a realistic, secure, and positive self-concept
	.64	is sensitive, accepting, and respectful of the needs, feelings, concerns and worth of others

FACTOR	LOADING	ITEMS
	.57	fosters both independent and group efforts
	.44	demonstrates appropriate communication skills
	.49	fosters a realistic, secure and positive self-concept in students and others
3: Teacher as an Assessor (PCT of VAR = 3.8)	.48	gathers, records, and accurately interprets non-test information to diagnose pupil needs
	.61	administers, scores, and accurately interprets teacher-made and commercially constructed diagnostic test instruments
4: Teacher as a Professional (PCT of VAR = 3.1)	.50	takes initiative in promoting professional, scholarly growth

Table 3 contains the means and standard deviations for all three groups on these four factors.

TABLE 3

MEANS AND STANDARD DEVIATIONS FOR L.E.A. FACULTY, I.H.E. FACULTY, AND I.H.E. STUDENTS ON THE FOUR FACTORS

GROUP	STRATEGIST	PERSON	ASSESSOR	PROFESSIONAL
L.E.A. FACULTY	$\bar{X}$ =-.04 S.D.= .83	$\bar{X}$ =-.06 S.D.= .87	$\bar{X}$ = .02 S.D.= .68	$\bar{X}$ =-.10 S.D.= .68
I.H.E. FACULTY	$\bar{X}$ =-.03 S.D.= 1.19	$\bar{X}$ = -.18 S.D.= 1.15	$\bar{X}$ =-.16 S.D.= .97	$\bar{X}$ = .08 S.D.= .86
I.H.E. STUDENT	$\bar{X}$ = .13 S.D.= .80	$\bar{X}$ = .24 S.D.= .69	$\bar{X}$ = .01 S.D.= .83	$\bar{X}$ = .26 S.D.= .67

The results of the ANOVA using teacher as a strategist are found in Table 4.

TABLE 4

ANALYSIS OF VARIANCE USING TEACHER AS STRATEGIST AS DEPENDENT VARIABLE

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARES	F	PL
Between	3.39	2	1.69	2.28	.10
Within	491.31	662	.74		
Total	494.69	664			

The univariate F- ratio of 2.28 is not significant (= .05) and consequently no significant differences existed among the perceptions of the three groups on role of teacher as a strategist and no follow-up analysis was necessary.

Table 5 contains the results of the second ANOVA using teacher as a person as the dependent variable. The F - ratio of 8.68 is significant well beyond the .05 level indicating that a significant difference exists

TABLE 5

ANALYSIS OF VARIANCE USING TEACHER AS PERSON AS THE DEPENDENT VARIABLE

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARES	F	PL
Between	12.78	2	6.39	8.68	.0002
Within	487.39	662	.74		
Total	500.16	664			

among these groups. Scheffe's test was then employed to identify which groups were responsible for this overall significance. The student group scored significantly higher than both faculty groups, while no difference was found between I.H.E. and L.E.A. faculties.

Table 6 shows the ANOVA results using teacher as assessor as the criterion. The univariate F of 1.58 was not significant indicating that no significant

differences existed among these groups in their perceptions of the role of the teacher as an assessor.

TABLE 6

ANALYSIS OF VARIANCE USING TEACHER AS ASSESSOR AS THE DEPENDENT VARIABLE

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARES	F	PL
Between	1.76	2	.88	1.58	.21
Within	369.28	662	.56		
Total	371.03	664			

Results of the final ANOVA, using teacher as a professional, appear in Table 7.

TABLE 7

ANALYSIS OF VARIANCE USING TEACHER AS A PROFESSIONAL AS THE DEPENDENT VARIABLE

SOURCE	SUM OF SQUARES	D.F.	MEAN SQUARES	F	PL
Between	15.65	2	7.83	16.08	.0001
Within	322.12	662	.49		
Total	337.77	664			

These results indicate that there is an overall significant difference among the three groups. Again, Scheffe's Post Hoc procedure was employed to identify where these differences occured. The follow-up test showed that students scored significantly higher than the L.E.A. faculty but not higher than the I.H.E. faculty and that there were no differences between I.H.E. and L.E.A. faculties.

In summary, it was found that no differences existed between I.H.E. and L.E.A. faculties on any of the four factors. Differences were found to exist, however, between the students and both faculty groups on the Teacher as Person factor and between students and the L.E.A. faculty on the Teacher as Professional factor.

CONCLUSIONS AND IMPLICATIONS

The results of this study indicate that preservice teacher education students tend to rate the importance of the role of the teacher as a person higher than did faculty from both the I.H.E. and the L.E.A. A possible explanation for this finding is that students have a more idealistic outlook of teaching since they lack actual classroom experience. This suggests a need to investigate the degree to which preservice teachers hold different opinions of teacher roles at various stages of their

program. Another implication for future study deals with follow-up of graduates after employment. For example, do ratings of the importance of various teacher roles change after one year, three years, or five years of actual teaching experience? Currently Stoehr (1978) is investigating the attitudinal changes of students as a function of varying amounts of field experiences. This investigation is presently at the data collection stage.

The second finding from this study suggests that preservice teacher education students rate the importance of Teacher as a Professional higher than L.E.A. faculty but not higher than I.H.E. faculty. While this may again be a result of idealism on the part of students, a more plausible explanation is that colleges generally place more emphasis on professional and scholarly growth. Frances Fuller's research (1969) on students, lends credibility to this interpretation since her findings indicate that preservice teachers tend to first be concerned with self image, feelings, sucess in the classroom and satisfaction and gains. Students are in the process of completing coursework and working on projects. By the same token I.H.E. faculty generally feel more need (due to promotions and tenure) to publish and to conduct research.

Finally, the general agreement between the I.H.E. and L.E.A. faculties suggests that differences between these groups regarding the importance of various teacher roles are mostly of degree and not of kind and that these differences are more a function of the nature of the institutions in which they teach rather than on fundamental differences between the two groups.

APPENDIX A

CBTE QUESTIONNAIRE

Name (optional): _____

School: _____

Position: Faculty _____

Administration _____

Subject area currently teaching _____

Teaching experience (in years): Elementary _____

Jr. High _____

Secondary _____

Age: _____

Highest degree earned: Bachelors _____

Masters _____

Doctorate _____

Sex: Male _____

Female _____

Familiarity with the concept of CBTE: Extensive _____

Some _____

Very little _____

None _____

****

Key

SD - strongly disagree

D -- disagree

U -- undecided

A -- agree

SA - strongly agree

* PLEASE NOTE: To help minimize random error, please respond to each statement in terms of the BEGINNING FIRST-YEAR TEACHER.

1.	The effective teacher must measure and evaluate instructional strategies in relation to pupil performance, objectives, curriculum materials and/or learning activities and modify accordingly.	SD	D	U	A	SA
2.	The effective teacher must demonstrate flexibility in adapting to varied situations.	SD	D	U	A	SA
3.	The effective teacher must work cooperatively and effectively with students, teaching colleagues, and other school community personnel.	SD	D	U	A	SA
4.	The effective teacher must use classroom regulatory procedures (rules/guidelines regarding freedom and constraint) to meet identified pupil needs, abilities and learning styles.	SD	D	U	A	SA
5.	The effective teacher must measure and evaluate objectives in relation to pupil performance, instructional strategies, curriculum materials and/or learning activities and modify accordingly.	SD	D	U	A	SA

6.	The effective teacher must foster an atmosphere conducive to high student interest, enthusiasm, initiative and/or creative pursuit to meet identified pupil needs, abilities and learning styles.	SD	D	U	A	SA
7.	The effective teacher must exhibit a realistic, secure, and positive self-concept. (emotional maturity).	SD	D	U	A	SA
8.	The effective teacher must gather, record, and accurately interpret other (non-test instrument) information to diagnose pupil needs, abilities and learning styles.	SD	D	U	A	SA
9.	The effective teacher must administer, score and accurately interpret both teacher-made and commercially constructed diagnostic test instruments.	SD	D	U	A	SA
10.	The effective teacher must be sensitive, accepting, and respectful of the needs, feelings, concerns and worth of others.	SD	D	U	A	SA
11.	The effective teacher must foster both independent (self-directed) and group efforts to meet identified pupil needs, abilities, and learning styles.	SD	D	U	A	SA
12.	The effective teacher must demonstrate appropriate communication skills.	SD	D	U	A	SA
13.	The effective teacher must take initiative in promoting professional, scholarly growth.	SD	D	U	A	SA
14.	The effective teacher must organize classroom facilities to meet identified pupil needs, abilities and learning styles.	SD	D	U	A	SA
15.	The effective teacher must prescribe appropriate objectives for pupils under consideration.	SD	D	U	A	SA
16.	The effective teacher must use resource personnel within and without the school to meet identified pupil needs, abilities and learning styles.	SD	D	U	A	SA
17.	The effective teacher must use a variety of curriculum materials and/or learning activities to meet identified pupil needs, abilities and learning styles.	SD	D	U	A	SA
18.	The effective teacher must prescribe appropriate instructional strategies for pupils under consideration.	SD	D	U	A	SA

19.	The effective teacher must measure and evaluate curriculum materials and/or learning activities to meet identified pupil needs abilities and learning styles in relation to pupil performance, objectives and instructional strategies and modify accordingly.	SD	D	U	A	SA
20.	The effective teacher must organize various pupil groupings as required to meet identified pupil needs, abilities, and learning styles.	SD	D	U	A	SA
21.	The effective teacher must use a variety of instructional strategies and teacher aids to meet identified pupil needs, abilities and learning styles.	SD	D	U	A	SA
22.	The effective teacher must foster a realistic, secure and positive self-concept in students and others.	SD	D	U	A	SA
23.	The effective teacher must accept and carry out professional, administrative and school-community related responsibilities and activities.	SD	D	U	A	SA
24.	The effective teacher must prescribe appropriate curriculum materials and/or learning activities for pupils under consideration.	SD	D	U	A	SA
25.	The effective teacher must measure and evaluate pupil performance in relation to objectives, instructional strategies, curriculum materials and/or learning activities.	SD	D	U	A	SA

****

On the rest of this sheet please list any questions you have concerning CBTE and any comments you have relating to specific statements on this questionnaire.

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